

# OXYGEN SAFETY

## SAFE HANDLING PRACTICES

1. **Never use oil or grease on any device that will be attached to an oxygen cylinder.**

Grease or oil can violently explode if it comes in contact with high-pressure oxygen. If grease or oil is noted around or on the regulator, do not try to clean it but return the regulator to the nearest supplier for cleaning and repair before it is used. If grease or oil is noted on or around the cylinder valve or aperture, do not use the cylinder and immediately inform the oxygen supplier of this condition.

2. Do not allow smoking around oxygen equipment that is operating and never use oxygen around an open flame. Although oxygen will not explode or burn by itself, it does support combustion and will cause burning objects to flame vigorously. The area where oxygen is in use must be clearly marked with signs that read "Oxygen – No Smoking."

3. Oxygen cylinders should always be well secured, preferably supported by a case in the upright position or lying horizontally. This will prevent damage to the valve assembly. Since oxygen cylinders when full contain between 2,000 and 2,200 pounds per square inch (PSI) of pressure, breaking of the valve assembly could turn the cylinder into a jet-propelled missile.

4. Store cylinders that are not in use in a cool, well-ventilated room and away from any corrosives.

5. Use only regulators and gauges intended for use with oxygen.

6. When opening the cylinder, stand so that the cylinder valve is between you and the regulator; this could prevent injury if the regulator should explode.

7. Ensure that the valve seat insert and gasket are in good condition before assembling equipment; this will prevent dangerous leaks. (See Figure 8-3).

8. **Never** attempt to tighten the cylinder valve or any part of the valve. If the cylinder valve is leaking, place it well away from hazards and notify the oxygen supplier immediately.

